

Form PTO-1449

Docket Number (Optional)  
MTV-014.05Application Number  
10/731,702INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(On several sheets if necessary)

Applicant  
Buchwald, Stephen et al.Filing Date  
December 9, 2003

Group Art Unit

1620

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EXAMINER INITIALS & TRADEMARK		DOCUMENT NUMBER		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
ES	A1	US 4,604,474	08/05/86	Kumobayashi et al.	556	7	03/21/85	
ES	A2	US 4,691,037	09/01/87	Yoshikawa et al.	556	18	01/06/86	
ES	A3	US 4,739,084	04/19/88	Takaya et al.	556	21	04/15/87	
ES	A4	US 4,739,085	04/19/88	Takaya et al.	556	21	06/15/87	
ES	A5	US 4,954,644	09/04/90	Sayo et al.	556	14	09/07/88	
ES	A6	US 4,992,519	02/12/91	Hou, D. et al	568	315	12/21/89	
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	A10	US 5,206,399	04/27/93	Sayo et al.	556	20	10/01/91	
	A11	US 5,223,632	06/29/93	Ishizaki et al.	556	21	03/01/91	
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


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A33	US 5,808,162	09/15/98	Sayo et al.	568	10	07/18/96
A34	US 5,817,877	10/06/98	Hartwig et al.	564	399	09/19/97
A35	US 5,824,830	10/20/98	Ikariya	585	269	08/12/97
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						YES	NO
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B2	EP 0 135 392 A2	03/27/85	European Patent Application				X
B3	EP 0 156 607 A2	10/02/85	European Patent Application				
B4	EP 0 156 607 B1	10/02/85	European Patent Specification				
B5	EP 0 174 057 A2	03/12/86	European Patent Application				
B6	EP 0 174 057 B1	03/12/86	European Patent Specification				
B7	EP 0 118 257 B1	12/17/86	European Patent Specification				X
B8	EP 0 235 450 A1	09/09/87	European Patent Application				
B9	EP 0 135 392 B1	02/03/88	European Patent Specification				
B10	EP 0 503 884 A1	09/19/91	European Patent				X
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B12	EP 0 466 405 B1	01/15/92	European Patent Specification				
B13	EP 0 667 350 A1	08/16/95	European Patent Application				X
B14	WO 95/22405	08/24/95	PCT				

Form PTO-1449				Docket Number (Optional) MTV-014.05		Application Number 10/731,702	
<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> (Use several sheets if necessary)				Applicant Buchwald, Stephen et al.			
				Filing Date December 9, 2003		Group Art Unit 1626	
	B15	JP 0 733 0786	12/19/95	Japan Patent Abstract		X	
	B16	JP 8311090	11/26/96	Japan			X
	B17	JP 0 923 528 9	09/09/97	Japan Patent Abstract		X	
	B18	EP 0 802 173 A1	10/22/97	European Patent		X	
	B19	EP 0 826 694 A1	03/04/98	European Patent Application			
	B20	WO 98/12202	03/26/98	PCT			X
	B21	WO 98/15515	04/16/98	PCT			
	B22	EP 0 849 274 A1	06/24/98	European Patent Application			X
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	C3	John P. Wolfe et al., "Highly Active Palladium Catalysts for Suzuki Coupling Reactions," <i>J. Am. Chem. Soc.</i> , Vol. 121, pp. 9550-9561 (1999)					
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		Filing Date December 9, 2003	Group Art Unit 1626
	C13	Bei, X. et al., "A Convenient Palladium/Ligand Catalyst for Suzuki Cross-Coupling Reactions of Arylboronic Acids and Aryl Chlorides", Tetrahedron Letters, 40:3855-3858 (1999)	
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	C15	Beller, M. et al., "First Palladium-Catalyzed Aminations of Aryl Chlorides", Tetrahedron Letters, 38:2073-2074 (1997)	
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	C19	Cornils, B., "Industrial Aqueous Biphasic Catalysis: Status and Directions", Org. Proc. Res. Dev., 2:121-127 (1998)	
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	C31	Muratake, H. et al., "Palladium-Catalyzed Intramolecular $\gamma$ -Arylation of Aliphatic Ketones", Tetrahedron Letters, 38:7581-7582 (1997)	
	C32	Nishiyama, M. et al., "Synthesis of N-Arylpiperazines from Aryl Halides and Piperazine under a Palladium Tri-tert-butylphosphine Catalyst", Tetrahedron Letters, 39:617-620 (1998)	
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	C55	Chemical Abstracts Vol. 124 no. 25, June 17, 1996; Abstract no. 343650, Columbus Ohio, US	
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<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> <i>(Use several sheets if necessary)</i>		Applicant Buchwald, Stephen et al.	
		Filing Date December 9, 2003	Group Art Unit 1620
ES	C64	Hattori, T. et al., "Nucleophilic Aromatic Substitution Reactions of 1-Methoxy-2-(diphenylphosphinyl)naphthalene with C-, N-, and O-Nucleophiles: Facile Synthesis of Diphenyl(1-substituted-2-naphthyl)Phosphines", Synthesis, no. 2 : 199-202 (Feb. 1994).	
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	C72	International Search Report	
EXAMINER ES		/Ebenezer Sackey/ 05/24/06	

Form PTO-1419	Docket Number (Optional) MTV-01405	Application Number 10/731,702
<b>INFORMATION DISCLOSURE CITATION</b> <b>IN AN APPLICATION</b> (Use several sheets if necessary)		
Applicant BUCHWALD, Stephen L. et al.		Group Art Unit Not Yet Assigned 1676
Filing Date December 9, 2003		

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
ES	AA 6,274,745	08-14-2001	Inanaga et al.			
	AB					
	AC					
	AD					
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	AK					

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	AL						
	AM						
	AN						
	AO						
	AP						

**OTHER DOCUMENTS**

(Including Author, Title, Date, Pertinent Pages Etc.)

	AQ	
	AR	
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EXAMINER	<i>Shenck Sackey</i>	DATE CONSIDERED 5/25/06
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.



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**SUPPLEMENTAL  
INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION**  
(Use several sheets if necessary)

Docket Number (Optional)  
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Application Number  
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Applicant  
Buchwald, S.L.

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Group Art Unit  
1626

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
ES	DA 0 731 105	09-1996	EP	-	-		

**OTHER DOCUMENTS**

(Including Author, Title, Date, Pertinent Pages Etc.)


EXAMINER	<i>Heather Buckley</i>	DATE CONSIDERED	<i>5/25/06</i>
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Form PTO-1449

**SUPPLEMENTAL  
INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION**  
(Use several sheets if necessary)

Docket Number (Optional)  
MTV-014.05Application Number  
10/731,702Applicant  
Buchwald, S.L.Filing Date  
12/09/03Group Art Unit  
1626**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AB	US-6,307,087	10-2001	Buchwald et al.	558	388	

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

**OTHER DOCUMENTS**

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EXAMINER

*Shenah Buchwald*

DATE CONSIDERED

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Sheet Page 1 of 1

Form PTO-1449		Docket Number (Optional) MTV-014.05		Application Number 10/731,702	
<b>SUPPLEMENTAL INFORMATION DISCLOSURE CITATION / IN AN APPLICATION</b> <i>(Use several sheets if necessary)</i>		Applicant Buchwald, S.L.			
		Filing Date 12/09/03		Group Art Unit 1626	
<b>U.S. PATENT DOCUMENTS</b>					
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	FILING DATE IF APPROPRIATE
ES	AC 5,663,426	09/02/97	Albanese et al.	562	35 10/02/95
<b>FOREIGN PATENT DOCUMENTS</b>					
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS Translation YES NO
<b>OTHER DOCUMENTS</b> <i>(Including Author, Title, Date, Pertinent Pages Etc.)</i>					
ES	AD	Database CAPLUS on STN Chemical Abstracts (Columbus, Ohio USA) Fabbri et al., CA:121:108962 "Binaphthyl-substituted chiral phosphines and oxides from binaphthophospholes and nucleophiles" abs of Synthetic Comm., 1994, Vol. 24, No. 9, pages 1271-1278			
ES	AE	Database CAPLUS on STN Chemical Abstract (Columbus, Ohio USA), Old et al., CA 133:43406 "Efficient Palladium-Catalyzed N-Arylation of Indoles" abs of Organic Letters. 200, Vol. 2, No. 10, pages 1403-1406			
ES	AF	Database CAPLUS on STN Chemical Abstracts (Columbus, Ohio USA) Tomori et al. CA:133:266921 "An Improved Synthesis of Functionalized Biphenyl-Based Phosphine Ligands" abs of Journal of Organic Chemistry. 2000, Vol. 65, No. 17, pages 5334-5341			
ES	AG	Database CAPLUS on STN Chemical Abstracts (Columbus, Ohio USA), Van Der Winkel et al., CA:114:229033 "Investigations of highly crowded phosphino lambda 3, lambda 5-diphosphaphenanthrene" abs of Heteroatom Chemistry. 1991, Vol. 2, No. 1, pages 17-28			
ES	AH	Database CAPLUS on STN Chemical Abstracts (Columbus, Ohio USA), Huang et al., CA:139:117168 "Expanding Pd-Catalyzed Bond Forming Processes: The First Amidation of Aryl Sulfonates, Aqueous Amination and Complementary with Cu-Catalyzed Reactions, abs of J. Amer. Chem. Soc. 2003, Vol. 125, No. 22, pages 6653-6655			
ES	AI	International Search Report, PCT/US03/38945 mailed on October 12, 2004			
EXAMINER				DATE CONSIDERED 5/25/06	
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